

**REMARKS:**

Claims 10-19 are in the case and presented for consideration.

Non-elected claim 20 has been canceled subject to applicant's right to file a divisional application covering this method claim.

The specification has been corrected to refer to the companion patent No. 6,620,254 and a Terminal Disclaimer is filed with this amendment along with the appropriate fee and in response to the Examiner's rejection of claims 10-19 under the judicially created doctrine of obviousness-type double patenting. This rejection is respectfully traversed.

The Examiner has also rejected claims 10-12 as being fully anticipated by U.S. Patent 3,598,083 to Dort et al. (hereafter "Dort"). The remaining claims 13-19 are rejected as obvious from Dort in view of U.S. Patent 5,029,555 to Dietrich et al. (hereafter "Dietrich").

The present invention as defined in the single independent claim 10 as requiring, among other things, "said moon system having at least two moon wheels 29 *staggered one upon the other, along said moon axis 19* and mutually distant ..." (emphasis added).

The Examiner's attention is directed to the attached page labeled Exhibit A, which is a marked-up copy of the first sheet of drawings of Dort.

Although the Examiner holds that Dort teaches a sun system 18 rotatable about a sun axis 21 and coupled to drive motor 16, in fact the number 18 identifies a cover plate which is rotated by a shaft 21 and is meant to ultimately cover and expose a crucible 16. In fact, the sun system of Dort rotates about a central axis 33 near the top

of Fig. 1 of the reference. This causes rotation of a rotor 32 which carries a plurality of arms 35 which each carry a planet system rotating about a planet axis 39. This is all between a fixed upper plate 31 and a lower drive ring 43. A plurality of moon systems are rotatably mounted about respective moon axes 58, to each planet system and, as shown in Fig. 2 of Dort, the moon systems are rotated by a chain 59.

The planet system is rotated by a plurality of pins 42, which engage with the fixed ring 43 so that as the sun system rotates the planet system also rotates.

Because the planet systems are held on arms 35 at an acute angle to the central axis 33 of the sun system, it is true that the moon systems on each planet system are vertically spaced from each other. The spacing actually changes as the moon systems rotates around the angled planet axis 39.

It is not true, however, that the moon systems have moon wheels that are staggered one upon the other, along the moon axis. This would represent a major difference in the geometry of Dort and one which would upset the driving system of Dort. This difference, thus, between claim 10 and the Dort disclosure is believed also to be unobvious to the person having ordinary skill in this field since it is not taught or suggested how Dort would be modified to provide vertically stacked moon systems that each are spaced along a single moon axis.

Claims 11 and 12 are believed to further distinguish the invention over Dort.

Claims 13-19 are also believed unobvious over the combination of Dort and Dietrich. As noted above, Dort does not utilize stacked moon systems on a common axis. This feature is also not taught by Dort, nor is Dort sufficient to teach the skilled artisan how it should be rearranged and provided with an appropriate drive mechanism

as claimed, for example, in claims 13-19, even if Dort is supplemented to the teaching of Dietrich.

By this amendment, thus, the application and claims are believed to be in condition for allowance and favorable action is respectfully requested.

The examiner is also respectfully invited and urged to telephone the undersigned if any matters remain which can be treated by telephone interview in the interest of reaching a conclusion to the prosecution of this case.

Dated: November 8, 2005

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Peter C. Michalos', written over a horizontal line.

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